

# Institute of Medicine Sets First-Ever DRI for Potassium

## Dairy foods among the greatest sources of potassium in the American diet

### What is Potassium's Function?

Potassium is a mineral that helps regulate fluids and mineral balance and is needed for muscle contractions and transmission of nerve impulses<sup>1</sup>. It also helps regulate blood pressure; an important role considering one in five Americans is living with hypertension<sup>1,2</sup>.

Potassium plays such an important role in blood pressure regulation and stroke prevention that the Food and Drug Administration has approved the use of the health claim "diets containing foods that are good sources of potassium and low in sodium may reduce the risk of high blood pressure and stroke," for foods that are naturally low in sodium, fat, and cholesterol, and provide at least 350 mg of potassium per serving, such as fat free and lowfat milk and some yogurts.

### How Much Potassium is Needed?

Until recently no official recommendation for potassium intake existed, although many health professionals recommended 2 grams a day. But in February of 2004, after an extensive review of scientific literature, the Institute of Medicine set the Adequate Intake of potassium for adults at 4.7 grams a day - more than double previous estimates. However, more than 90% of American children and adults are not meeting these recommendations.

#### DIETARY REFERENCE INTAKE FOR POTASSIUM<sup>3</sup>

Males & Females	Adequate Intake, mg/d
1-3 years	3500
4-8 years	3800
9-18 years	4500
19-50 years	4700
>50 years	4700

### What are the Effects of Potassium Deficiency?

Potassium deficiency can result in high blood pressure, stroke, congestive heart failure, cardiac arrhythmias, weakness, depression and glucose intolerance, as well as increased risk of kidney stones, and increased bone turnover<sup>3</sup>.

### What Foods Provide Potassium?

Milk provides most of the potassium in the American Diet<sup>4</sup>. An 8 oz serving of milk provides about 350-400 mg of potassium. Three to four servings of milk a day provides 1050-1600 mg of potassium, up to a third of the potassium recommendation<sup>5</sup>. Other common sources of potassium include:

#### Sources of Potassium<sup>5-7</sup>

Medium baked potato (with skin)	610 mg
8 oz yogurt	490 mg
8 oz yogurt smoothie	424 - 320 mg
½ cup pasta sauce	369 mg
8 oz milk	366 mg
6 inch banana	362 mg
1 oz almonds	206 mg
2-3/8" orange	174 mg
½ cup cottage cheese	108 mg



Recommend 3 daily servings of dairy to help your patients get potassium, protein and other important nutrients.

#### Sources:

1. Insel P, Turner RE, Ross D, eds. Nutrition, 2002 Update. Jones and Bartlett Publishers. Boston. 2002.
2. American Heart Association Web site, High Blood Pressure Statistics. Accessed May 12, 2004. <http://www.americanheart.org/presenter.jhtml?identifier=2139>
3. Institute of Medicine, Dietary Reference Intakes for Water, Potassium, Sodium, Chloride, and Sulfate. National Academy Press. Washington, DC. 2004.
4. Cotton PA, Subar AF, Friday JE, Cook A. Dietary sources of nutrients among US adults, 1994 to 1996. J Am Diet Assoc. 2004 Jun;104(6):921-30.
5. U.S. Department of Agriculture, Agricultural Research Service. 2004. USDA National Nutrient Database for Standard Reference, Release 16-1. Nutrient Data Laboratory Home Page. <http://www.nal.usda.gov/fnic/foodcomp> (Milk, lowfat, fluid, 1% milkfat, with added vitamin A NDB No: 01082, Yogurt, fruit, low fat, 11 grams protein per 8 ounce NDB No: 01122, Nuts, almonds NDB No: 1206, Oranges, raw, all commercial varieties NDB No: 09200, Sauce, pasta, spaghetti/marinara, ready-to-serve NDB No: 06931, Bananas, raw NDB No: 09040, Cheese, cottage, lowfat, 2% milkfat NDB No 01015)
6. Dannon Web site [http://www.dannon.com/dn/dnstore/cgi-bin/ProdSubEV\\_Cat\\_240859\\_SubCat\\_262093\\_NavRoot\\_200.htm](http://www.dannon.com/dn/dnstore/cgi-bin/ProdSubEV_Cat_240859_SubCat_262093_NavRoot_200.htm). Accessed July 15, 2004.
7. Yoplait Nouriche Web site [http://yoplait.com/products\\_nouriche.aspx](http://yoplait.com/products_nouriche.aspx). Accessed July 15, 2004.



NATIONAL DAIRY COUNCIL